

**To:** CN=Bruce Herbold/OU=R9/O=USEPA/C=US@EPA[]  
**Cc:** CN=Tom Hagler/OU=R9/O=USEPA/C=US@EPA;CN=Carolyn  
Yale/OU=R9/O=USEPA/C=US@EPA;CN=Erin  
Foresman/OU=R9/O=USEPA/C=US@EPA;CN=Sam  
Ziegler/OU=R9/O=USEPA/C=US@EPA;CN=Tim Vendlinski/OU=R9/O=USEPA/C=US@EPA[];  
N=Carolyn Yale/OU=R9/O=USEPA/C=US@EPA;CN=Erin  
Foresman/OU=R9/O=USEPA/C=US@EPA;CN=Sam  
Ziegler/OU=R9/O=USEPA/C=US@EPA;CN=Tim Vendlinski/OU=R9/O=USEPA/C=US@EPA[];  
N=Erin Foresman/OU=R9/O=USEPA/C=US@EPA;CN=Sam  
Ziegler/OU=R9/O=USEPA/C=US@EPA;CN=Tim Vendlinski/OU=R9/O=USEPA/C=US@EPA[];  
N=Sam Ziegler/OU=R9/O=USEPA/C=US@EPA;CN=Tim  
Vendlinski/OU=R9/O=USEPA/C=US@EPA[]; N=Tim  
Vendlinski/OU=R9/O=USEPA/C=US@EPA[]  
**Bcc:** []  
**From:** CN=Karen Schwinn/OU=R9/O=USEPA/C=US  
**Sent:** Thur 11/17/2011 2:10:44 AM  
**Subject:** Fw: model ops for BDCP

Thanks Bruce. Glad to hear those documents made sense to you and that they were complete enough.  
Was the "State Board alternative" included in the documentation?

Now I need you to explain them to the rest of us. If not Monday (because we may not have sufficient time  
and Tom will be out), the following Monday? We need to understand enough to be able to comment on  
the EIS, to say whether they have considered an adequate range, and to begin to consider the wq  
implications of each.

~~~~~  
KAREN SCHWINN  
Associate Director  
Water Division  
U.S. EPA Region 9  
75 Hawthorne Street (Wtr-1)  
San Francisco, CA 94105  
415/972-3472  
415/297-5509 (mobile)  
415/947-3537 (fax)  
~~~~~

----- Forwarded by Karen Schwinn/R9/USEPA/US on 11/16/2011 05:59 PM -----

**From:** Bruce Herbold/R9/USEPA/US  
**To:** Karen Schwinn/R9/USEPA/US@EPA  
**Date:** 11/16/2011 04:10 PM  
**Subject:** model ops for BDCP

The package looks very good and offers enough detail both to guide modeling and for evaluators like me  
to see if the modeling matches the assumptions.

One large issue is that the modeling is done on a monthly time-step and the operations agreed to in the 5  
agency memo use a lot of decision points on much smaller time steps. How the modeling tries to resolve  
this will do a lot toward biasing the results one way or another.

hasta Monday

Bruce Herbold  
USEPA Fish Biologist  
(415) 972 3460